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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
CORSARO, NICK

ART UNIT	PAPER NUMBER
2684	7

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/035,896	BURR, JEREMY	
	Examiner	Art Unit	
	Nick Corsaro	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RESPONSE TO AMENDMENT

Response to Arguments

1. Applicant's arguments filed 01/08/2004 have been fully considered but they are not persuasive.

The applicant's features in the claims, i.e., a device in a network including at least 3 devices, the device including a receiver designed to receive a communication from at least one other device; a transmitter designed to transmit messages to at least one other devices; and a synchronization system designed to synchronized with a second device, reads upon Haartsen in view of Peters as follows.

Haartsen discusses a system that includes at least three devices wherein each of the devices can form a piconet for communication between the devices. Therefore, Haartsen is showing the applicants feature of "a device in a network including at least 3 devices, the device including a receiver designed to receive a communication from at least one other device; a transmitter designed to transmit messages to at least one other devices". Haartsen discusses that the devices form the Piconets where the devices can form and reform into networks via anyone of the station becoming a master station and synchronizing with the other stations. Therefore, Haartsen disclosing the applicants limitation a synchronizing, designed to synchronize with the other devices, and therefore Haartsen is implying that there is a synchronizing system however does not specifically state such a system. Peters modifies to show it would be obvious to one skilled in the art to have such a system, where, Peters is showing a similar network with synchronizations system.

In response to the applicant's argument that clear suggestion is needed in the prior art to make a modification by obviousness, the examiner disagrees in that the motivation to combiner can come from the references or a universal motivation that can be seen by one skilled in the art. With that said, the examiner will explain that the motivation to combine, although not necessary, did come from the secondary reference. Haartsen and Peters were both teaching ad-hoc networks similar in nature, and in fact performing the same tasks. The Haartsen reference described the system in general but not the signaling. Peters, discusses the signaling for the same type of network. Further, Peters says in the background that the topic of the invention is for the devices to find each other and synchronize. Therefore, the applicant's argument is not persuasive.

With regard to the applicants argument that no synchronization period is suggested a synchronization period, the argument is not persuasive, in that Haartsen already shows that the devices synch then un-synch for an interval. Peters shows the intervals.

With regard to the applicants argument that hind site reasoning was used the argument is not persuasive, in that, as can be seen by the rejection, all reasoning including motivation was taken from the references.

Therefore, the argued features are written broad such that the read upon the cited references or are the same as the cited references.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 6-11, 14, 17, 19-24, 27, and 30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen et al. (6,026,297) in view of Peters et al. (6,601,093).

Consider claim 1, Haartsen discloses a device (X, figure 2) in a network including at least three devices (see abstract lines 1-8, col. 1 lines 5-10, col. 4 lines 62-67, and col. 2 lines 7-35). Haartsen discloses a receiver designed to receive a communication from at least one other device (see col. 1 lines 5-10, col. 1 lines 18-45, col. 1 lines 63-67, col. 2 lines 42-55, col. 2 lines 7-35, and col. 7 lines 29-33, where Haartsen discloses a wireless unit participating in a piconets (wireless local area networks) for full duplex communications of packets over a radio channel, therefore, the units have has a receivers). Haartsen discloses a transmitter designed to transmit messages to at least one other device (see col. 1 lines 5-10, col. 1 lines 18-45, col. 1 lines 63-67, col. 2 lines 7-35, col. 2 lines 37-55, col. 4 lines 63-67, and col. 5 lines 1-67, and col. 6 lines 1-37, where Haartsen discusses a wireless unit participating in several piconets with several masters and communicating with the masters, i.e., having a transmitter). Haartsen discloses synchronization designed to synchronize with a second device (see col. 3 lines 43-65, col. 4 lines 11-33, col. 1 lines 30-47, col. 1 lines 55-67, col. 5 lines 1-63, col. 6 lines 7-65, where Haartsen is discussing that the unit must synchronize to the clocks and hopping sequences of units of first and second Piconets).

Haartsen discloses synchronization for synchronizing with a second device, therefore, implies a system for synchronization (see col. 1 lines 30-47 and col. 6 lines 6-65, and col. 3 lines 45-65), however, does not specifically disclose a synchronization system. Peters teaches a

synchronization system (see figure 3, col. 8 lines 11-55, col. 6 lines 18-44, and col. 2 lines 15-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have a synchronization system, as taught by Peters, thus allowing a connection when servers are not available to aid in connection for ad-hoc networks, as discussed by Peters (col. 1 lines 44-67).

Consider claims 6 and 19, Haartsen discloses a method for a first device to communicate with a second device in a network including at least the first device, the second device, and a third device (see col. 1 lines 5-10, col. 1 lines 17-55, and col. 2 lines 42-55). Haartsen discloses discovering the second device (see col. 2 lines 41-55, col. 5 lines 53-63, col. 6 lines 7-11, col. 6 lines 40-46, where Haartsen is discussing that t unit participating in a first piconet (wireless LAN, contacts or is contacted by another unit to start a second LAN). Haartsen discloses determining a synchronization interval with the second device; and synchronizing with the second device independently of the third device (see col. 5 lines 52-67, col. 6 lines 1-67, col. 4 lines 62-67, and col. 5 lines 1-52, where Haartsen is discussing the units discover by being paged or paging other units in other piconets and agreeing upon time out periods in which they disconnect and reconnect with each other, i.e., synchronization periods).

Haartsen discloses a synchronization interval (see col. 6 lines 7-65), however does not specifically disclose a period. Peters teaches a period (see col. 9 lines 32-45, col. 3 lines 20-33, and col. 5 lines 29-56, col. 6 lines 24-30, col. 8 lines 11-55, and 4 lines 29-57, where Peters discussed that the addresses are used to establish the interface).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have a period, as taught by Peters, thus stopping ambiguities when roaming, as discussed by Peters (col. 9 lines 12-45).

Consider claim 2, Haartsen teaches a synchronization table listing synchronization information for the device (see col. 5 lines 1-27).

Consider claim 7 and 20, Haartsen teaches discovering the third device; determining a synchronization period with the third device; and synchronizing with the third device independently of the second device (see col. 4 lines 12-17, col. 5 lines 54-67, col. 6 lines 1-67, where Haartsen is discussing the unit can synchronize with other units in other piconets and when leaving each decides on a time out period).

Consider claim 8 and 21, Haartsen teaches discovering the third device by the second device; determining a synchronization period between the second device and the third device; and synchronizing the second device with the third device independently of the first device (see col. 5 lines 1-67 and col. 6 lines 1-67 where Haartsen is discussing that any of the devices can discover or be discovered through paging and synchronize with those devices independently of the other devices and inherently in any order).

Consider claims 9 and 22, Haartsen does not specifically disclose discovering a second device includes discovering a second device within range of the first device. Peters teaches discovering a second device includes discovering a second device within range of the first device (see col. 6 lines 44-67, col. 8 lines 11-55, and col. 1 lines 11-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and discovering a second device includes discovering a second device within range of

the first device, as taught by Peters, thus allowing the devices to form new networks when in range of necessary devices, as discussed by Peters (col. 1 lines 10-67).

Consider claims 10 and 23, Haartsen discloses determining a synchronization interval includes arbitrating a time interval between synchronizations (see col. 5 lines 1-67, and col. 6 lines 1-67). Haartsen discloses a synchronization interval (see col. 6 lines 7-65), however does not specifically disclose a period. Peters teaches a period (see col. 8 lines 11-55, col. 9 lines 32-45, col. 3 lines 20-33, and col. 5 lines 29-56, and col. 6 lines 24-30, where Peters is discussing that the addresses are used to negotiate the interface).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have a period, as taught by Peters, thus stopping ambiguities when roaming, as discussed by Peters (col. 9 lines 12-45).

Consider claims 11 and 24, Haartsen teaches reestablishing the interface with the second device after the time interval, (see col. 5 lines 1-67 and col. 6 lines 1-67). Haartsen does not specifically disclose a re-establishment period. Peters teaches a re-establishment period (see col. 9 lines 12-45, col. 2 lines 15-30, col. 3 lines 20-31, col. 8 lines 11-55, and col. 6 lines 19-45, and col. 4 lines 29-57, where Peters is discussing that the addresses are used to negotiate the interface).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have a reestablishment period, as taught by Peters, thus stopping ambiguities when roaming, as discussed by Peters (col. 9 lines 12-45).

Consider claims 14 and 27, Haartsen teaches synchronizing with the second device includes resetting a clock in the first device (see col. 3 lines 45-65, col. 5 lines 62-67, col. 6 lines 1-67, and col. 7 lines 1-67).

Consider claims 17, and 30, Haartsen teaches determining a new synchronization interval with the second device (see col. 3 lines 42-67, col. 4 lines 1-67, col. 5 lines 1-67 and col. 6 lines 1-67). Haartsen discloses a synchronization interval (see col. 6 lines 7-65), however does not specifically disclose a period. Peters teaches a period (see col. 8 lines 11-55, col. 9 lines 32-45, col. 3 lines 20-33, and col. 5 lines 29-56, and col. 6 lines 24-30, where Peters is discussing that the addresses are used to negotiate the interface).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have a period, as taught by Peters, thus stopping ambiguities when roaming, as discussed by Peters (col. 9 lines 12-45).

3. Claims 3-5, 12-13, 18, 25-26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen in view of Peters as applied to claims 1, 6, and 19 above, and further in view of Jacquet et al. (6,590,891).

Consider claim 3, 18, and 31 Haartsen discloses the device, method and system, as modified by Peters above, wherein a synchronization table is used. Haartsen further discloses a synchronization table, with device ID, frequency hopping pattern, frequency offset, and time interval for resynchronization (see col. 5 lines 1-67). Peters discloses a linking based on a technology (see col. 2 lines 15-30 and col. 8 lines 11-55). Haartsen and Peters do not specifically disclose a frequency and technology. Jacquet teaches a frequency and technology (see col. 6 lines 10-67, and col. 7 lines 7-50, where Jacquet is discussing a frequency and the technology,

i.e., frequency hopping or spread spectrum). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen and Peters, and have a frequency and technology, as taught by Jacquet, thus allowing tuning between devices, as discussed by Jacquet (col. 1 lines 30-67).

Consider claim 4, 12, 13, 25, and 26, Haartsen, discloses the invention as modified by Peters. Haartsen and Peters disclose negotiating an arbitrated interface with device ID, frequency-hopping pattern, frequency offset, and time interval for resynchronization, including a technology (see Haartsen col. 5 lines 1-67, col. 6 lines 1-67 and Peters col. 2 lines 15-31, col. 5 lines 29-60, col. 8 lines 12-55). Haartsen and Peters do not specifically disclose an arbitration system with frequency and technology. Jacquet teaches an arbitration system with frequency and technology (see col. 7 lines 7-67, and col. 8 lines 1-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have an arbitration system with frequency, as taught by Jacquet, thus allowing tuning between devices, as discussed by Jacquet (col. 1 lines 30-67).

Consider claim 5, Haartsen does not specifically disclose a table updater. Peters teaches a table updater (see col. 8 lines 44-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen, and have a table updater, as taught by Peters, thus allowing a connection when servers are not available to aid in connection for ad-hoc networks, as discussed by Peters (col. 1 lines 44-67).

4. Claims 15, 16, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen in view of Peters as applied to claim 1, 6, and 19, above, and further in view of Du et al. (6,603,740).

Consider claims 15, 16, 28, and 29, Haartsen and Peters do not specifically disclose the synchronizing with the second device includes informing the second device that the first device has data to transmit. Du teaches synchronizing with the second device includes informing the second device that the first device has data to transmit (see col. 5 lines 10-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Haartsen and Peters, and have synchronizing with the second device include informing the second device that the first device has data to transmit, as taught by Du, thus allowing networks to be bridged and exchange data, as discussed by Du (col. 1 lines 15-30).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication should be directed to Nick Corsaro at telephone number (703) 306-5616.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 customer Service Office whose telephone number is (703) 306-0377.

Nick Corsaro

Nick Corsaro
Primary Examiner